LITERATURE SURVEY

Thyroid Disease Classification Using Ml

1. Mohammad et al says The classification was performed on both the sampled and unsampled datasets for better comparison of the dataset. After dataset manipulation, we obtained the highest accuracy for the random forest algorithm, equal to 94.8% accuracy and 91% specificity.

2. Jae Hoon et al says This real-world thyroid function monitoring could aid in the management and early detection of thyroid dysfunction. In the thyroidology field, research involving the range of digital medicine technologies and their clinical applications is expected to be even more active in the future.

3. Shaik Razia et al says By using the Classification Algorithm a hypothesis can be selected from the set of alternatives the best fits a set of observations. Machine Learning is used for the high-dimensional and the multi-dimensional data. Classy and automatic algorithms can be developed using Machine Learning.

4. Mirza Muntasir et al says Subsequently, a detailed comparative analysis was carried out in terms of accuracy, precision, sensitivity, F1 score, ROC-AUC which provided conclusive evidence that Multilayer Perceptron (MLPC) was the most proficient algorithm among these algorithms with an accuracy of 99.70% after hyperparameter optimization.

5. Orhan Turken et al says Our results indicate an increased prevalence of autoimmune and nonautoimmune thyroid diseases in breast cancer patients.

6. Martynaet al says According to the saliva flow rate values, significantly reduced saliva secretion was observed in patients with HT. In conclusion, it is not possible to unequivocally state if salivary biomarkers can potentially be used in autoimmune thyroid disease diagnosis. Therefore, further investigations, including salivation disorders, are necessary to validate these findings

7. Tomohiro et al says Mean SUV ? 2 was strongly associated with abnormal thyroid function in this large cohort, indicating that mean SUV with FDG-

PET/CT can be used as a criterion for thyroid evaluation. Preliminarily, this study shows the potential utility of detecting thyroid dysfunction based on imaging findings.

8. Eva M. Andersson et al says However, the association with period of exposure was non-monotonic, so the significance is considered to be a chance finding. Our research was limited by the relatively simple exposure assessment.

9. Prabal Poudel et al says The computation of features for training these classifiers is based on a novel approach recently proposed by our team, where autoregressive modeling was applied on a signal version of the 2D thyroid US images to compute 30 spectral energy-based features for classifying the thyroid and non-thyroid textures. Our approach differs from the methods proposed in the literature as they use image-based features to characterize thyroid tissues. We obtained an accuracy of around 90% with all the three methods.
10. Allan Chen et al says Population-based, trimester-specific TSH cutoffs for diagnosis of hypothyroid disease in pregnancy result in more accurate diagnosis and better estimates for prevalence of disease. Prevalence of hyperthyroidism in pregnancy varies depending on timing of screening. The prevalence rates reported in this study represent the best estimate to date of the true rates of thyroid disease in pregnancy.

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3. Razia, Shaik, P. Siva Kumar, and A. Srinivasa Rao. "Machine learning techniques for thyroid disease diagnosis: a systematic review." Modern Approaches in Machine Learning and Cognitive Science: A Walkthrough: Latest Trends in AI (2020): 203-212.

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10. Dong, Allan Chen, and Alex Stagnaro-Green. "Differences in diagnostic criteria mask the true prevalence of thyroid disease in pregnancy: a systematic review and meta-analysis." Thyroid 29.2 (2019): 278-289.